

**In the Claims:**

Please cancel claims 1-5 after adding the following new claims.

Claims 1-5 (cancelled)

Please add the following new claims

6. (new)      A biopsy instrument comprising:
- a base;
  - a probe assembly detachably mounted to said base, said probe assembly comprising:
    - a cutter assembly comprising:
      - a cutter;
      - a gear mechanism adapted to move said cutter;
    - a piercer assembly comprising:
      - a piercer;
      - a probe mount;
  - a drive assembly detachably mounted to said cutter assembly, said drive assembly comprising:
    - a flexible drive shaft;
    - a transmission, said transmission operatively connected to a distal end of said flexible drive shaft and said gear mechanism.
7. (new).      A biopsy instrument comprising:
- a base including a firing mechanism;
  - a probe assembly detachably mounted to said base, said probe assembly comprising:
    - a cutter assembly comprising:
      - a cutter;
      - a gear mechanism adapted to move said cutter;
    - a piercer assembly comprising:
      - a piercer including a cutter lumen adapted to receive said cutter;

a probe mount adapted to slideably connect said piercer to said cutter assembly;

a drive assembly detachable mounted to said cutter assembly, said drive assembly comprising:

a flexible drive shaft;

a transmission adapted to transmit motion from a distal end of said flexible drive shaft to said gear mechanism.

8 (new). A transmission assembly for a medical instrument said transmission assembly comprising:

a rotation coupling assembly comprising:

a rotation drive coupling;

a translation coupling assembly comprising:

a translation drive coupling; and

an encoder assembly.